

# Use of methyl pyruvate for the purpose of reducing weight gain in mammals.

## Abstract

The present invention relates to the use of methyl pyruvic acid (a methyl ester of pyruvic acid) and/or methyl pyruvate (methyl pyruvate is the ionized form of methyl pyruvic acid) for the purpose of reducing weight (fat) gain in mammals by orally administering therapeutically effective amounts of methyl pyruvate. The method also has the effect of increasing body protein concentration, improving insulin resistance, lower fasting insulin levels, preventing fat deposition and increasing cellular energy production. When used as a dietary supplement, energizer or pharmaceutical, this anion can be formulated as a salt. *The methyl pyruvate compounds which can be used in the present method include: (1) a salt using a monovalent cation (such as sodium or potassium methyl pyruvate) or (2) a divalent cation (such as calcium or magnesium methyl pyruvate) and analogs of these compounds which can act as substrates or substrate analogs for methyl pyruvate* Use of methyl pyruvate and/or methyl pyruvic acid can be effective when administered orally or infused on either a chronic and/or

acute basis. In the following text, the terms "methyl pyruvate, methyl pyruvate compounds, methyl pyruvic acid" are used interchangeably.